

ber of berries present and number of berries damaged by these birds were recorded. The percentage of damage ranged between 3.2 and 45. The percentage of damage was found to

DEPARTMENT OF ENTOMOLOGY,
COLLEGE OF AGRICULTURE,
A. P. AGRICULTURAL UNIVERSITY,
RAJENDRANAGAR,
HYDERABAD-500 030,
December 10, 1982.

be more in bunches in the periphery of the garden as compared to those in the interior of the garden.

S. TEJ KUMAR
A. RANGA REDDY
K. LAKSHMINARAYANA

REFERENCES

PERUMAL, R. S., SUBRAMANIAM, T. R. & DAVID P. LEELA (1972): Some observations on the birds visiting grapevine. *South Indian Hort.* 20 (1-4): 94-95.

TEJ KUMAR, S., REDDY, A. RANGA & LAKSHMINARAYANA, K. (1981) : Birds associated with grape

gardens around Hyderabad. *Mayura News Letter of the Bird Watchers Club of Andhra Pradesh* 2 (2): 8-9.

TOOR, H. S., & RAMZAN, M. (1974): A study on grapes lost to birds. *Punjab Hort. J.* 14 (1-2): 46-48.

16. SOME NOTES ON THE REPTILES OF THE ANDAMAN AND NICOBAR ISLANDS

The snakes of the Andaman and Nicobar islands are fairly well covered by Smith's FAUNA OF BRITISH INDIA, Volume 3(1943), but the lizards have received less attention. In recent years, the Zoological Survey of India has arranged several collecting trips to various islands in that group and a paper on the last trip, which included Mr Humayun Abdulali, has already been published (Biswas & Sanyal 1980). Over the same period, Mr Abdulali, though primarily interested in birds, has also made small collections of reptiles for the Bombay Natural History Society in the course of his several trips. The present notes refer mainly to the specimens collected during his last trip to the Andamans and Nicobars in March/

April 1976, which I have had the opportunity of examining¹. The earlier specimens referred to were identified at the Bombay Natural History Society and the notes other than taxonomic are by Mr. Abdulali. Another small collection of Dr K. K. Tiwari collected in 1977 from Andaman and Nicobar has been also examined.

The first figure is the serial number in Smith's FAUNA OF BRITISH INDIA and the volume and page number are also quoted. The measurements are in millimetres.

FAMILY Emydidae

9. *Cuora amboinensis* (Daudin) (Type: island of Amboyna). Malay Box-tortoise Smith 1 : 84.

1 ex. Car Nicobar

Collector's No. CN 34. Carapace length 48, breadth 42, plastron length 41.

¹ The delay in submission is due to Mr Abdulali's inability to examine the earlier material collected by him and to include it here — Author's note at the instance of Mr Abdulali.

This was found preserved in a school museum at Mus, Car Nicobar, and Mr Abdulali was assured by the Headmaster, Mr Godfrey Lambert, that it had been locally obtained. This is the first record from Car Nicobar, though one young specimen obtained on Great Nicobar in 1966 is in the Zoological Survey Collection (Biswas & Sanyal 1977).

Family GEKKONIDAE

25. *Gymnodactylus rubidus* (Blyth) (Andaman Islands) Smith 2 : 54.

1 ex. Campbell Bay, Great Nicobar. Col. No. GN 89.

11 specimens were obtained on earlier trips to the Andamans, as also on Car Nicobar, and at Campbell Bay, Great Nicobar, but no record of its occurrence in the Nicobar appears to have been published². The specimen is a male with the longitudinal prenal groove well developed. The reddish and/or light chocolate transverse bars on the body though diffused and irregular can be distinctly seen. The two postanal pores on each side at the base of tail, as figured by Smith (1935) are well developed and prominent.

65. *Hemidactylus frenatus* Schlegel (Java) 2 : 95.

4 ex. Car Nicobar. Col. Nos. CN 10, 11, 16, 23.

1 ex. Camorta. Col. No. C 30. 1 ex. Campbell Bay, Great Nicobar. Col. No. CB 79. 1 ex. Port Blair, South Andaman, Col. No. 9.

In two specimens the tails are regenerated and lack the enlarged pointed tubercles otherwise present.

The species is widely distributed over Indo-China, Malaysia and Australasia. In India it has been recorded from Bengal and is the com-

² After completion of this paper one was recorded from Great Nicobar (1980, Biswas & Sanyal, p. 258).

mon gecko in southern India; also Ceylon; as far west as East Africa and on St. Helena.

It has not been recorded before from Great Nicobar. At Port Blair, both pale and dark coloured individuals were noted, perhaps more of the former. Common in houses and in trees at Port Blair, and in other places in South and Middle Andamans.

76. *Gekko gekko* (Linnaeus) ("Habitat in Indiis") 2 : 111.

1 ex. Campbell Bay, Great Nicobar, Col. No. 78.

A dried-up individual was found stuck on a barrel of tar by the roadside. A detailed examination is not possible but it differs from the specimens from the Andamans in the rostral not touching the nostril, having 5 or less small scales longitudinally arranged between two lines of tubercles along the body, and with more than six small scales in each annulus of the tail.

G. gekko is known in Burma for its very distinctive call tuktoo heard over long distances. This all has not yet been recorded from the Andaman or Nicobar Islands.

77. *Gekko smithi* Gray (Type locality Penang). 2 : 113.

1 ex. in forest near Port Blair, Andamans. Col. No. 84, obtained on 12 April, 1976. 1 ex. Wrightmyo, South Andaman; collector K. K. Tiwari on 21st April, 1977. 2 ex. Campbell Bay, Great Nicobar, Collector K. K. Tiwari 26830, March, 1977.

This specimen as well as the earlier ones from the Andamans in B. N. H. S. collection have the rostral touching the nostril, and do not agree with the key to species in Smith's FAUNA. The material available does not permit any definite conclusions, but if it should be found to be different from *smithi*, Tytler's name *verreauxi* (JASB 33, 1865, p. 546) from Andamans is available.

According to Tytler the cry is a loud "tuk,

tuk, tuk”, repeated five or six times, while Abdulali on an earlier trip to Great Nicobar recorded a gecko call as “A slow deep *truk truk truk* changing into a rapid *tuk tuk tuk* with many variations” (*J. Bombay nat. Hist. Soc.* 64 (2): 142), which he said was similar to that notes for this species in the Andamans. He also noted another gecko call at night as a loud bird-like “*tk-chr-rr-rr*” and in March 1977 a similar call was noted in Great Nicobar.

81. **Ptychozoon kuhli** Stejneger (Ramri Island off Arakan Coast) 2 : 117.

Col. No. C 32. Camorta, Central Nicobar.

On wall of a shed in jungle in Camorta in daylight. Not green in colour but various shades of grey as in *Hemidactylus* sp. and very cryptically coloured.

On 25 March 1976, in heavy forest in Car Nicobar, the vertical trunk of a tree, about 18 inches from ground showed two eggs stuck to the surface close together with traces of two other pairs and a single egg, all forming a cluster within a few inches. The pair of intact eggs were white and showed dark inside, presumably developing. Each hemispherical egg had a flat circular base 15.5 mm in diameter but only 10.6 mm high. Adults were not seen but the eggs agreed well with the recorded description (Tiwari, *J. Bombay nat. Hist. Soc.* 58 (2) : 523-527). The other eggs of which marks were visible may have been of the same or other individuals.

83. **Phelsuma andamanense** Blyth (Andaman Islands) 2 : 121.

One was obtained on Narcondam earlier and Rex Pimento, the Society’s assistant, obtained several on Sopari-palms in a garden at Port Blair during the day, in April, 1976.

107. **Goniocephalus subcristatus** (Blyth) (Port Blair, Andamans) 2 : 163.

7 ex. Car Nicobar. Col. Nos. CN 1, 18-21, 26,

5 ex. Little Andamans. Col. No. LA 4-8.

There is considerable variation in colour and pattern which cannot be linked with size or sex, except that the young are more brightly coloured. The collector thought that those from Little Andaman were of two species. Though Stoliczka is quoted in the FAUNA (1935, p. 164) as indicating that they were 20 or 30 feet up a tree, all were obtained on the ground and on tree trunks within 5 feet of the ground.

Two of the females from among 5 specimens obtained in the Andamans earlier contained two eggs each. It has also been recorded as *G. humei* of Tillinchang in Central Nicobar by Kloss (1903, p. 67). The species is common and widespread and specimens were obtained on the small island of Battye Malve, south of Car Nicobar.

124. **Calotes cristatellus** (Kuhl) (type locality unknown) 2 : 184.

2 ex. Car Nicobar. Col. No. CN 3 and 26.

One with white stripes down its sides was obtained in a coconut grove on 26 March, 1976.

Smith (1935) gives its distribution as over a scattered area and refers to a specimen from Great Nicobar in the Zoological Museum at Copenhagen. Though *Pseudocalotes archiducissae*, of which the type is lost and which is synonymised with this species, was described by Fitzinger from the Nicobars; the present specimens are presumably the first definite records from Car Nicobar.

126. **Calotes jubatus** (Dum. & Bib.) (Java).

There is a specimen in BNHS collection obtained by J. C. Anderson in Nicobar but with no additional data. One was obtained by Zoological Survey of India at Camorta, Middle Andamans 1970 (Biswas & Sanyal 1980).

MISCELLANEOUS NOTES

Calotes danieli Tiwari & Biswas (Campbell Bay, Great Nicobar).

2 ex. Great Nicobar. Col. Nos. GN 82 & 83.

This was described (Tiwari, K. K. & Biswas, S., 1973) on a single specimen and the present specimens confirm the differences noted. In addition, the present opportunity of comparing them with *Calotes cristatellus* reveals some more points of difference.

In *danieli* the nuchal crest is not so well developed and prominent as in *cristatellus* in which the spines, usually 9, are large, compressed and dagger-shaped, whereas in *danieli* they are small triangular, compressed and erect, these scales numbering 12-14. The supra-ocular scales are large and flat without keel or carina. On the other hand in *cristatellus* these scales are smaller, narrow and with keels. The range of scales round the body is 68 to 71. The tail is a little more than three times the body length.

In life the body colour is brilliantly green or

bluish green but it changes into brown or dark brown after preservation. The characteristic patch between eye and the tympanum with a white spot in the middle remains unchanged.

Following are the measurements (in mm) and scale counts of the three specimens, one holotype and two topotypes: (Table 1).

One of the specimens was rescued from a domestic hen when it was noted to be mud brown all over and with black below the eye. The collectors Rex Pimento and Cyrus Toorkey are positive that this was not due to earth or other substance but that it became green before insertion into formalin.

179. **Mabuya multifasciata** (Kuhl).

3 ex. Car Nicobar. Col. Nos. CN 2, 17 & 24.

The three specimens have 33 and 34 scales round the body and 19 lamellae under the fourth toe.

One was obtained on Pandanus roots and a field note states that it appeared to climb up coconut palms. One had yellow under the chin

179a. **Mabuya rudis** Boulenger

Mabuya rudis Boulenger, Cat. Lizards. Brit. Mus. 3: 188. 1 ex. Campbell Bay, Great Nicobar. Col. No. 80.

Smith (1935, p. 369) had suggested that this should be a subspecies of *M. multifasciata* but the following differences indicate a different species. (Table 2).

Some more differentiating characters are noticed after comparing the specimen with three specimens of the collection assigned to

TABLE 1

Zoological Survey of India Reg. No. 22455

Registration number	Holotype	GN 83	GN 82
Head length/breadth	22/11.5	22/11	21/11.5
Snout to vent	79	80	72
Axilla to groin	43	43	41
Vent to tip of tail	271	198+?	254
Fore limb	43	43	44
Hind limb	71	80	74
Scales round body	71	69	68
Spines of nuchal crest	12	14	12

TABLE 2

<i>M. multifasciata</i>	<i>M. rudis</i>
1. Hind limb not reaching axilla.	1. Hind limb reaching the axilla or beyond.
2. Subdigital lamellae smooth.	2. Subdigital lamellae keeled.
3. 30 to 34 scales round the body dorsal 3 rarely 5 keeled, lateral quite smooth.	3. 30 to 36 scales round body, dorsal and laterals strongly keeled.

multifasciata. Anterior border of the tympanum of the specimen referred to the present species is without larger projecting lobules but granular lobules instead round the border of tympanum. In the specimens belonging to *multifasciata*, there are 1 to 3 enlarged lobules in the anterior border. The scales from tympanum to the forelimb are comparatively very small and these are very prominently keeled as also the parietals and nuchals of the head shield. In *rudis* the 6th upper labial is the largest and the first lower labial is nearly equal to the 2nd but in the specimens of *multifasciata* the 5th upper (4th in one) labial is the largest and the 1st lower labial is smallest.

The body coloration is dark and a whitish line is there from lower border of eye to the tympanum. Following are the measurements (in mm) of the specimen and one of *multifasciata*: (Table 3).

TABLE 3

	<i>M. multifasciata</i>	<i>M. rudis</i>
Snout to vent	117	47
Tail	155	97
Head length (snout to tympanum)	24.9	12
Head width	19.2	8.5
Axilla to groin	57	23
Fore limb	46	20
Hind limb	65	29
Scales round the body	33	30

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Remarks. As this longlegged form occurs occasionally from widely separated parts of the Malay Archipelago, therefore according to Smith (1927) the name applied to a geographical race in its strict sense cannot be used but he had also objections to placing the specimens having the above mentioned characters under the species *rudis* as he thought intermediate examples between *rudis* and *multifasciata* were available. Unless it is definitely proved so the present species stands.

Family COLUBRIDAE

Xenochrophis piscator melanzostus (Boie)

2 ex. Campbell Bay, Great Nicobar, collector K. K. Tiwari on 8th April, 1977. 1 ex. Wrightmyo, S. Andaman, collector K. K. Tiwari in April, 1977.

So far this subspecies was known to occur only in Andaman but the present record extends its distribution further to the south in the Great Nicobar and it also very closely resembles the colour form of the *X. piscator* occurring in the Malay Peninsula (Smith 1943).

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S. BISWAS

REFERENCES

- BISWAS, S. & SANYAL, D. P. (1977): Notes on Reptilia collection from the Great Nicobar Island during the Great Nicobar Expedition, 1966. *Rec. Zool. Surv. India* 72: 107-124.
- _____ (1980): A report on the Reptilia fauna of Andaman and Nicobar

